

King County Wastewater Treatment Division

Summary of Objectives, Stakeholder Involvement, and Scope of Work for the Reclaimed Water Comprehensive Plan

MWPAAC Engineering and Planning Subcommittee Meeting September 3, 2008

The King County Council approved development of a reclaimed water comprehensive plan in the 2008 budget adopted in November 2007. The overall goal is to identify ways to better manage and use King County's treated effluent by developing a reclaimed water comprehensive Plan that identifies and prioritizes beneficial uses of reclaimed water, and reduces reliance on Puget Sound as a discharge site over the next 30 years. It is expected that a draft plan will be ready in 2010 and that the King County Executive will transmit a final plan to the council in 2011 for consideration and approval.

The following text summarizes the objectives, stakeholder involvement, and scope of work for the comprehensive plan.

Objectives

- Identify environmental benefits and impacts of reclaimed water, including ways to enhance benefits and mitigate adverse impacts, and incorporate findings into an economic analysis.
- Identify beneficial uses of reclaimed water and prioritize them using available information and criteria developed during the planning process.
- Identify what facilities are needed to serve these uses both near term (next 10 years) and long term (next 30 years).
- Develop policies to guide implementation of the plan.
- Develop a financing plan to cover costs of plan implementation, including on how costs are allocated.

Stakeholder Involvement in the Planning Process

Reclaimed water stakeholders include water purveyors, wastewater utilities, environmental groups, tribal governments, local elected officials, regulators, potential recreational, agricultural and industry user groups, civic groups, and equity and social justice interests, and the general public. Throughout the planning process, stakeholders will be asked to provide input and advice for the planning process. Input and advice will be solicited on the following:

- Potential reclaimed water uses, locations, and volumes.
- Development of policy criteria that will be used in the prioritization of reclaimed water uses to evaluate facility alternatives to serve these uses.
- Development of the financing plan, including identifying cost allocation and potential revenue sources.

Summary of Objectives, Stakeholder Involvement, and Scope of Work for the
Reclaimed Water Comprehensive Plan

August 28, 2008

Page 2

- Development of policies to guide plan implementation, including review and possible amendments to existing Regional Wastewater Services Plan reclaimed water policies.
- Provide input, review, and comment on SEPA Determination, scoping, and Draft EIS.
- Review and comment on the Draft Plan.

Individual meetings with stakeholders and stakeholder workshops will occur during the planning process. Monthly meetings are already scheduled with MWPAAC's Engineering and Planning Subcommittee to ensure MWPAAC is fully involved in the process.

Scope of Work Summary

Review the regional drivers for conducting a Reclaimed Water Comprehensive Plan now

- Regional drivers for the plan include:
 - Reducing reliance on Puget Sound as a discharge site for treated effluent
 - Preparing for potential climate change impacts—the past is no longer a predictor for future conditions
 - Potential for more stringent regulations of wastewater treatment and discharge
 - Environmental enhancements, such as addressing declining instream flows
 - Responding to requests for reclaimed water in a regional, systematic manner

Develop Policy Criteria

Policy criteria are being developed to guide King County throughout the reclaimed water planning process. The criteria will include environmental, public health, operational, financial, and community considerations. The criteria will reflect stakeholder input and will be forwarded to the King County Council for its review and approval. The development and use of policy criteria will help provide consistency and balance in how identified reclaimed water uses are prioritized and how facility alternatives are evaluated.

Identify Uses and Option Areas

Previous works by King County and other agencies will be reviewed to develop a database of identified uses, demands, and customers. In addition, available data on water bodies, wetlands, and groundwater aquifers will be assessed to determine potential locations for use of reclaimed water to enhance or restore the natural environment. Identified uses will be verified and augmented through stakeholder discussions, and information on the volume, season of use, and location will be collected for each use. Uses identified will be clustered into logical reclaimed water option areas.

Create Reclaimed Water Alternatives for Each Option Area

For each option area, alternatives will be developed, including regional treatment, satellite treatment, and secondary effluent treatment (where applicable). For each alternative, one treatment train will be developed that can meet the potential use application requirements for its option area.

Analyze Alternatives for Each Option Area

Each alternative developed will be analyzed for the uses identified in the option areas. Technical, economic, and environmental analyses will be done.

Technical analyses will include:

- Analysis of impacts of alternatives on current operations of the region-wide wastewater treatment system.
- Analysis of the effect that new capacity for producing reclaimed water may have on planned upgrades to the regional conveyance system and regional treatment plants to provide added capacity over time.

Economic and financial analyses will include:

- Development of capital cost estimates for the reclaimed water alternatives.
- Benefit/cost analysis of identified reclaimed water uses in relation to identified facility alternatives intended to produce and distribute reclaimed water. The benefit cost analysis will use the *Economic Framework for Evaluating Benefits and Costs of Water Reuse* developed by the WateReuse Foundation.
- Identification of revenue sources to cover the capital and operating costs for reclaimed water alternatives.
- Development of funding sources (such as wastewater rates, rates for selling reclaimed water, or other funding sources) for selected alternatives.
- Development of a financing plan to cover costs of plan implementation, including on how costs are allocated.

Environmental analyses will include:

- SEPA environmental impact analysis for the built and natural elements of the environment.
- Analysis of potential energy and greenhouse gas emission impacts associated with reclaimed water alternatives.
- Identification of alternatives means, other than reclaimed water, to achieve similar environmental benefits.
- Regulatory feasibility assessment of the proposed reclaimed water alternatives.

Develop Draft Reclaimed Water Comprehensive Plan and EIS

A draft reclaimed water comprehensive plan and a draft environmental impact statement (EIS) will be prepared based on the information developed and analyses conducted throughout the planning process. The draft comprehensive plan will include the plan purpose, planning process, development of alternatives, description of alternatives, policy issues, a proposed financing plan, proposed policies to guide the implementation of the plan, and other pertinent information.

The Draft EIS will discuss potential significant environmental impacts associated with the draft reclaimed water comprehensive plan. The EIS will include mitigation measures to avoid or minimize adverse impacts or enhance environmental quality.

Discussion Questions
MWPAAC E&P Sub-committee
September 3, 2008

- What is your general opinion regarding the interest in or need for reclaimed water in the Puget Sound region?
- What criteria should King County use in prioritizing and selecting reclaimed water projects/uses?
- When you consider reclaimed water, what concerns or opportunities seem most important to address?
- What do you think are the most important environmental benefits to using reclaimed water? What are the benefits that matter to the organization you represent? To the region?
- What issues or concerns do you have about reclaimed water?
- What should a review of the potential environmental impacts of reclaimed water include?
- What do you think the public will be most concerned about with regard to reclaimed water? (e.g., costs, uses, risks, benefits, etc.)?
- Are there conditions under which reclaimed water should be required?
- How should reclaimed water investments be paid for? Should those who benefit be the ones who pay? Those who benefit directly? Those who benefit indirectly? How should the County account for environmental or social benefits?
- Could you respond to the same question considering the following scenarios: (A) If reclaimed water investments have a direct affect on eliminating future investments or costs for wastewater system (i.e., prevent extra permit costs or expansion of South Plant, etc.); (B) If reclaimed water investments benefit the entire region – i.e., groundwater protection, stream flow augmentation, etc.; (C) If reclaimed water investments provide multiple public and private direct and indirect benefits (such as reducing effluent discharge to Puget Sound, irrigation for recreation, stream augmentation, etc).
- Do you think your customers would have any concerns/issues with the use of reclaimed water? If so, what are they?
- Are there issues that you think King County doesn't understand about your community's view of reclaimed water? If so, what are they, and what would you suggest King County do to reduce your concerns?